

IN THE CLAIMS:

1. – 11. (Cancelled)
12. (Previously Presented) A method, comprising the steps of:
culturing a plurality of immortal pluripotent cells in the presence of a cell culture medium under conditions which promote growth;
allowing a portion of the cells to grow and differentiate into differentiated human blood cells; and
isolating the differentiated human blood cells from the culture.
13. (Previously Presented) The method of claim 12, wherein the immortal pluripotent cells are cultured under conditions which promote asymmetric division resulting in the production of a population of daughter pluripotent cells and transient amplifying cells.
14. (Previously Presented) The method of claim 12 wherein prior to differentiation at least a portion of a plurality of immortal pluripotent cells is aggregated.
15. (Previously Presented) The method of claim 13 wherein prior to differentiation at least a portion of a plurality of immortal pluripotent cells is aggregated.
16. (Previously Presented) The method of claim 14 wherein the aggregation of at least a portion of a plurality of immortal pluripotent cells is achieved by gravity or centrifugation.
17. (Previously Presented) The method claim 12, wherein the culturing of the immortal pluripotent cells occurs in a first bioreactor, and wherein the transient amplifying cells are transferred to a second bioreactor and cultured under conditions that promote proliferation of the transient amplifying cells.
18. (Previously Presented) The method of claim 17 wherein the amplified transient

amplifying cells from the second bioreactor are transferred to a third bioreactor and cultured under conditions that promote further differentiation of the transient amplifying cells.

19. (Previously Presented) The method of claim 17, wherein the first bioreactor comprises a surface which binds differentially to a specific known cell type.

20. (Canceled)

21. (Previously Presented) The method of claim 12, further comprising:
lysing the human blood cells; and
isolating a protein from the lysed cells.

22. (Previously Presented) The method of claim 12, wherein the immortal pluripotent cells are self renewable over a period of at least three months.

23. (Previously Presented) The method of claim 12, wherein the immortal pluripotent cells are self renewable over a period of at least six months.

24. (Previously Presented) The method of claim 12, wherein the immortal pluripotent cells are self renewable over a period of at least twelve months.

25. (Previously Presented) The method of claim 12, wherein the immortal pluripotent cells are human embryonic stem cells.

26. (Canceled)

27. (Previously Presented) The method of claim 21, wherein the immortal pluripotent cells are human embryonic stem cells.

28. – 32. (Canceled)

33. (Previously Presented) A method, comprising the steps of:
culturing a plurality of immortal pluripotent cells in the presence of a cell culture medium under conditions which promote growth;
allowing a portion of the cells to grow and differentiate into differentiated human blood cells;
isolating the differentiated human blood cells from the culture;
lysing the human blood cells; and
isolating a protein from the lysed cells.
34. (Previously Presented) The method of claim 33, wherein the immortal pluripotent cells are cultured under conditions which promote asymmetric division resulting in the production of a population of daughter pluripotent cells and transient amplifying cells.
35. (Previously Presented) The method of claim 33 wherein prior to differentiation at least a portion of a plurality of immortal pluripotent cells is aggregated.
36. (Previously Presented) The method of claim 35 wherein the aggregation of at least a portion of a plurality of immortal pluripotent cells is achieved by gravity or centrifugation.
37. (Previously Presented) The method claim 35, wherein the culturing of the immortal pluripotent cells occurs in a first bioreactor, and wherein the transient amplifying cells are transferred to a second bioreactor and cultured under conditions that promote proliferation of the transient amplifying cells.
38. (Previously Presented) The method of claim 33 wherein the amplified transient amplifying cells from the second bioreactor are transferred to a third bioreactor and cultured under conditions that promote further differentiation of the transient amplifying cells.
39. (Previously Presented) The method of claim 38, wherein the first bioreactor comprises a surface which binds differentially to a specific known cell type.

40. (Previously Presented) The method of claim 33, wherein the immortal pluripotent cells are human embryonic stem cells.

41. (New) A method of forming human embryonic stem cell (hESC) aggregates, the method comprising obtaining a suspension of hESCs and subjecting the suspension to centrifugation, wherein the centrifugation causes aggregation of the hESCs.

42. (New) The method of claim 41 wherein prior to aggregation the hESCs are dissociated to become single cells.

43. (New) The method of claim 42 wherein hESCs are dissociated to become single cells through exposure to an agent which causes cell dissociation.

44. (New) The method of claim 43 wherein the agent is a protease.

45. (New) The method of claim 44 wherein the protease is trypsin.

46. (New) The method of claim 42 wherein the agent comprises trypsin and EDTA.

47. (New) The method of claim 41 wherein centrifugation is performed using low-attachment centrifugation plates or low-attachment holding vessels.

48. (New) The method of claim 47 wherein the centrifugation plates or holding vessels comprise round bottomed wells.

49. (New) The method of claim 47 wherein the centrifugation plates or holding vessels comprise conical shaped wells.

50. (New) The method of claim 41 further comprising the step of culturing the hESC aggregates in the presence of a culture medium under conditions which promote hESC growth

and allowing the aggregated hESCs to grow.

51. (New) The method of claim 41 or claim 50 further comprising the step of culturing the hESC aggregates in the presence of one or more differentiation factors which promote hESC differentiation and allowing the aggregated hESCs to differentiate.

52. (New) The method of claim 51 wherein the differentiated cells a human blood cells.

53. (New) The method of claim 50 or claim 51 further comprising the step of isolating the cultured and/or differentiated hESCs.